Dr. Ignacio González Martínez 18th of April 2018

Editor in Chief, Journal Mexican Chemical Society

Departamento de Química

Universidad Autónoma Metropolitana, Unit Iztapalapa

Ciudad de México, México

Dear Dr. González

 I am enclosing the original research paper

*Synthesis, characterization and cytotoxic activity of tioconazole coordination compounds with nickel(II), palladium(II) and platinum(II)*

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to be considered for publication on the Journal Mexican Chemical Society

 In this manuscript we present our work with coordination compounds with the transition metal ions Ni2+, Pd2+ and Pt2+. Coordination compounds with the ligand tioconazole and NiII (**1**-**5**), PdII (**6**-**8**) and PtII (**7**) were synthesized and fully characterized. The coordination compounds stabilized octahedral **1-5** and square planar **6-8** geometries, depending on the metal ion. Despite being voluminous, in excess of ligand, the tioconazole can be accommodated as a propeller occupying the six coordination sites of an octahedral nickel(II) atom. The crystallographic arrangements of compounds **4** and **5** were stabilized through hydrogen bonding and π∙∙∙stacking interactions.

 The octahedral nickel(II) compounds showed good cytotoxic activity (HeLa), the IC50 increased upon coordination to the metal ion when compared to the inactive free ligand, which is related to the nature of the metal ion, as the platinum and palladium complexes did not presented any significant activity.

We considered that our results are of interest to be published by this journal.

Best regards

Prof. Norah Barba-Behrens

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